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FULLY DOCUMENTED FISHERIES – IS REMOTE ELECTRONIC MONITORING THE FUTURE TOOL IN FISHERIES CONTROL?

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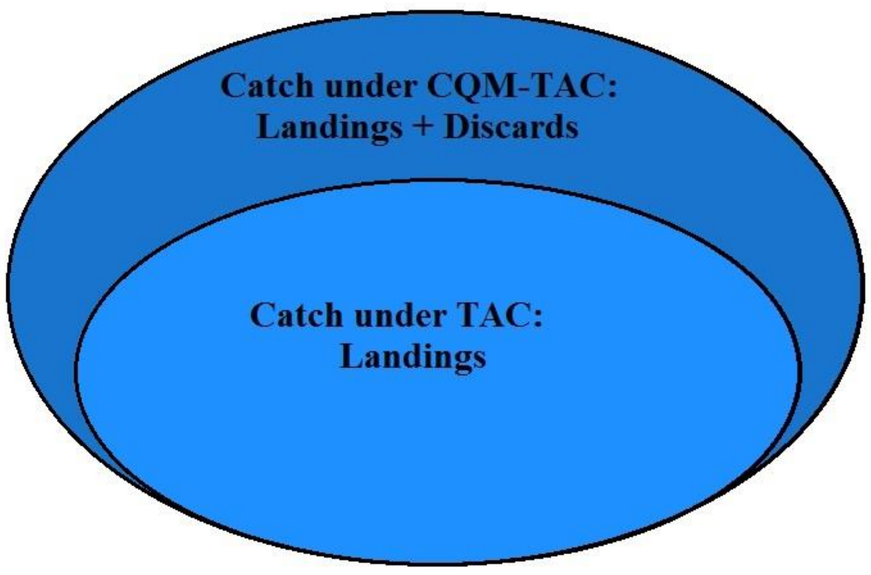
OBJECTIVES

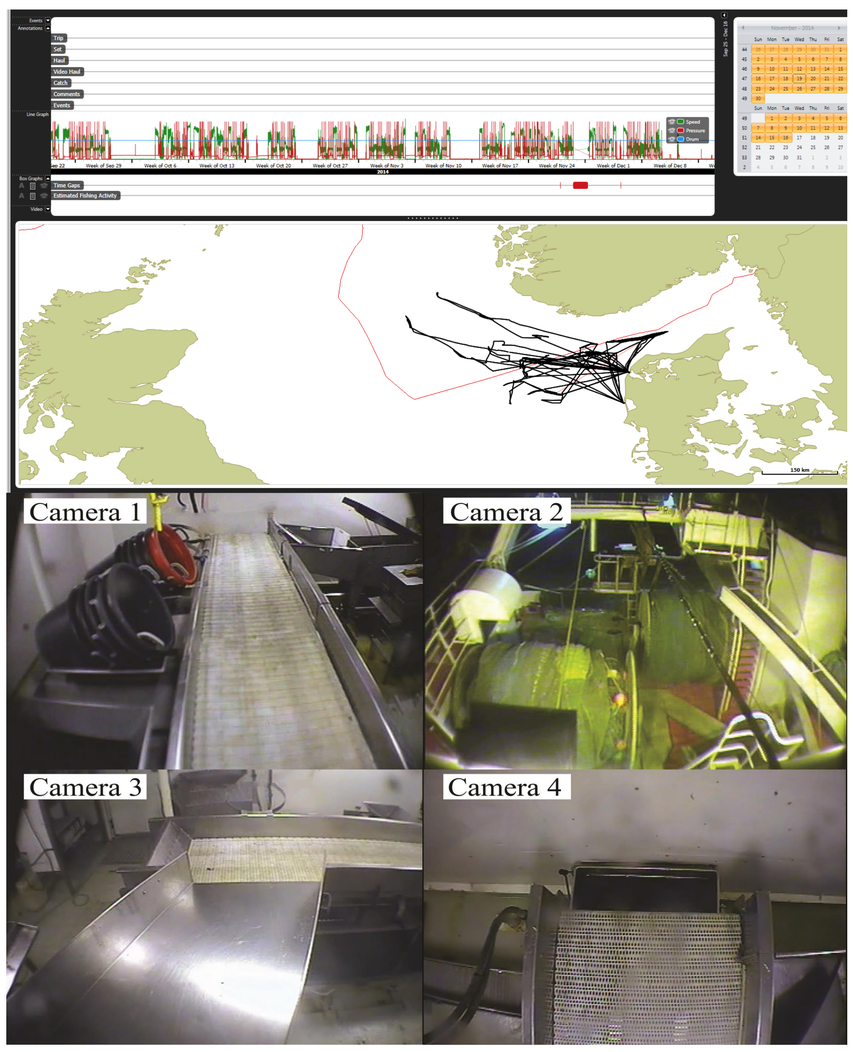
To investigate the potential for and possible effects of Remote Electronic Monitoring as a tool in Fully Documented Fisheries.



Schematic of the difference between the perceived catch under CQM-TAC and TAC.

METHODS

Data from participating fishing vessels were collected from 2010 to 2014 by use of the REM system developed by Archipelago Marine Research Ltd. (see pictures below). Sensor data and video footage were recorded and stored on the vessel for each fishing trip. Discard of cod from each vessel were estimated (weight) by visual audit of 10% of the recorded hauls.

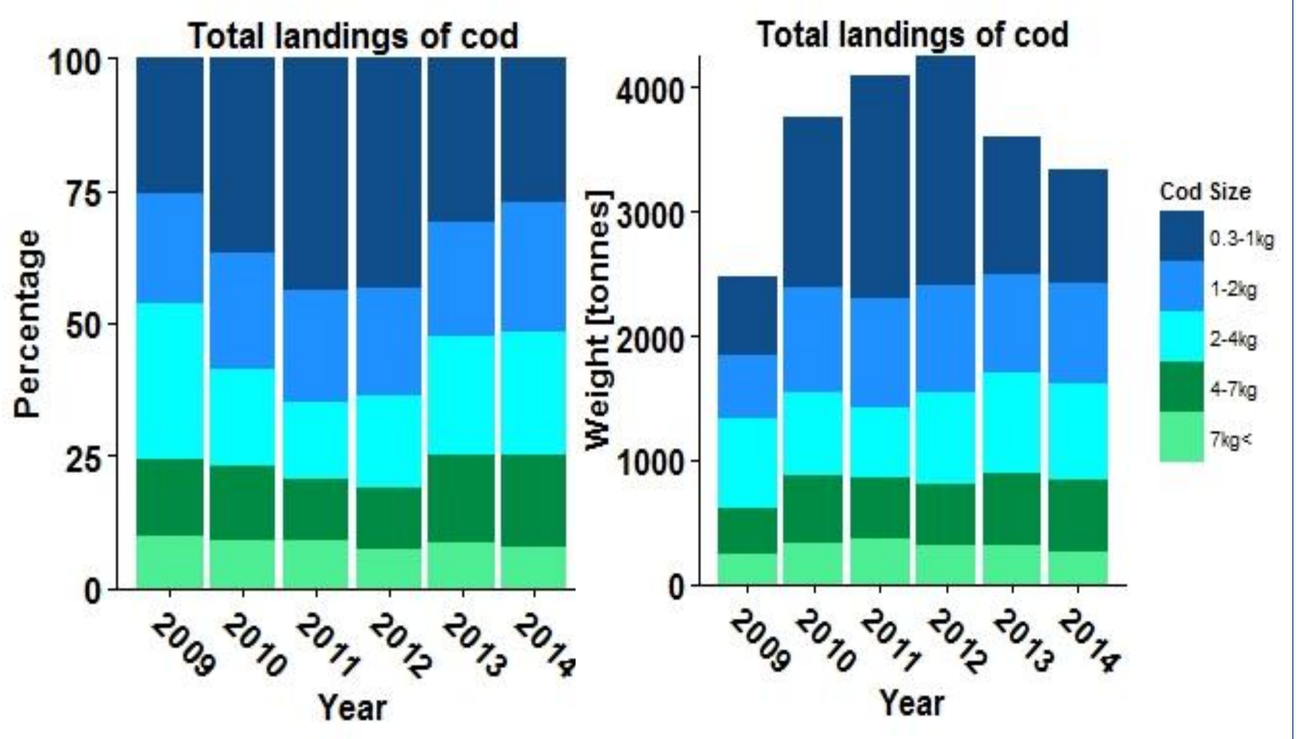


BACKGROUND

In January 2015 the Landing Obligation of the Common Fisheries Policy of the European Union was implemented on the first fisheries and species in EU waters.
Control measures for compliance with the Landing Obligation can be done by use of Remote Electronic Monitoring (REM) systems with closed-circuit television (CCTV). REM together with Catch Quota Management (CQM) has been tested in Denmark since 2010.

PRELIMINARY RESULTS

The smallest size sorting of cod (0.3-1 kg) constituted 25% of the landed catch for participating vessels in 2009.
After the onset of the project, catch composition of 0.3-1 kg cod were 37% in 2010, 44% in 2011, 43% in 2012, 31% in 2013 and 27% in 2014.



Of 5842 video sequences investigated a total of 715 had remarks due to faults, errors or degradation, corresponding to a total percentage of 12.2%.

Total video sequences	5842
Total video sequences with errors	715
Error percentage	12.2%
Video error percentage for poorest performing vessel	35.8%
Video error percentage for best performing vessel	0%

FURTHER STUDIES

Interviews and questionnaires with fishermen to elaborate on possible industry gains and obstacles regarding the use of REM systems with CCTV on commercial fishing vessels. Comparison between the self-sampling discard estimates conducted by fishermen and the assessed discards by video audit.

Denmark and The EU invest in sustainable fishing.
The project is supported by the Ministry of Food, Agriculture and Fisheries and the EU

Ministry of Food, Agriculture and Fisheries

The European Fisheries Fund